

EPSON[®]
PhotoPCTM
COLOR DIGITAL CAMERA



User's Guide

FCC COMPLIANCE STATEMENT

FOR AMERICAN USERS

This equipment has been tested and found to comply with the limits for a class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio and television reception. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause interference to radio and television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna
- Increase the separation between the equipment and receiver
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected
- Consult an experienced radio/TV technician for help.

WARNING

The connection of a non-shielded equipment interface cable to this equipment will invalidate the FCC Certification of this device and may cause interference levels that exceed the limits established by the FCC for this equipment. It is the responsibility of the user to obtain and use a shielded equipment interface cable with this device. If this equipment has more than one interface connector, do not leave cables connected to unused interfaces.

Changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment.

FOR CANADIAN USERS

This digital apparatus does not exceed the Class B limits for radio noise emissions from digital apparatus as set out in the radio interference regulations of the Canadian Department of Communications.

Le présent appareil numérique n'émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques de Classe B prescrites dans le règlement sur le brouillage radioélectrique édicté par le Ministère des Communications du Canada.

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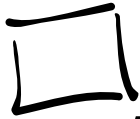


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Introduction



Your new EPSON® PhotoPC™ is a revolutionary, easy-to-use digital camera that enables you to take full-color pictures and immediately use them on your Macintosh.® You may have the PhotoPC Mac version or the Mac Connectivity Kit and Photo PC Windows version. Either way, you have everything you need, including software that lets you transfer your pictures to your computer's hard disk. You can edit, enhance, and organize your pictures or simply paste them into your documents.

Create professional letters, documents, and presentations with real life images right on your desktop. Share pictures with business colleagues or friends over the Internet. Add color and visual appeal to your newsletters, flyers, and brochures. Anything you can display on your screen or print will look better with PhotoPC pictures.

PhotoPC Features

PhotoPC is a complete system for capturing digital images, and includes the following features:

- | Base unit with 1MB internal memory for 16 high-resolution images (640 × 480 pixels) or 32 standard-resolution images (320 × 240 pixels)
- | 24-bit color image capture
- | Built-in flash with both automatic and manual settings
- | Self-timer
- | Automatic shut-off to save batteries
- | Variable shutter speed
- | Automatic date and time recording for each picture
- | Cable for transferring photos to your Macintosh (or PC cable with Mac adapter)
- | EasyPhoto™ software that lets you transfer, organize, enhance, and print your pictures
- | Use your pictures with any application
- | Print out your pictures on any color or black and white printer.

Optional Accessories

EPSON offers the following optional accessories for enhancing your PhotoPC:

- | 2MB and 4MB PhotoSpan™ memory modules
- | Universal AC adapter for use with a standard electric outlet.

You can also use standard 37 mm video camcorder lenses and filters available from leading suppliers, such as Tiffen.®

Minimum System Requirements

- | Macintosh with 68030 or higher processor or PowerPC
- | System Software version 7.1 or later
- | 8MB RAM (16MB recommended)
- | At least 15MB free hard disk space
- | VGA or SVGA monitor with at least 256-color display (thousands of colors recommended).

Where to Get Help

If you purchased your PhotoPC and/or Connectivity Kit in the United States or Canada, EPSON provides customer support and service through a network of Authorized EPSON Customer Care Centers.

EPSON also provides the following services when you dial (800) 922-8911:

- l Technical assistance with the installation, configuration, and operation of EPSON products
- l Assistance in locating your nearest Authorized EPSON Reseller or Customer Care Center
- l Customer relations
- l EPSON technical information library fax service
- l Product literature on current and new products.

You can purchase accessories, printed manuals, or parts for EPSON products from EPSON Accessories at (800) 873-7766 (U.S. sales only). In Canada, call (800) GO-EPSON. If you purchased your PhotoPC outside the United States or Canada, contact your EPSON dealer or the marketing location nearest you for customer support and service.

If you need help with EasyPhoto software, contact Storm Software as described on page 4.

Electronic Support Services

If you have a modem, the fastest way to access helpful tips, specifications, drivers, application notes, and bulletins for EPSON products is through the online services described below.

World Wide Web

If you are connected to the Internet and have a Web browser, you can access EPSON's World Wide Web site at <http://www.epson.com>.

EPSON's home page links users to What's New, EPSON Products, EPSON Connection,SM Corporate Info, and EPSON Contacts.

Link to the EPSON Connection for the latest drivers and FAQs (Frequently Asked Questions) and the EPSON Chat area. To get in touch with EPSON around the world, EPSON Contacts includes contact information for local EPSON subsidiaries.

EPSON Internet FTP Site

If you have access to the Internet and an FTP client, you can download drivers, FAQs, and sample files from EPSON's FTP site. Use your FTP client or Web browser to log onto <ftp.epson.com> with the user name anonymous and your e-mail address as the password.

EPSON Download Service

You can call the EPSON Download Service (BBS) at (800) 442-2007. No membership is required. Make sure your communications software is set to 8 data bits with 1 stop bit, no parity bit, and a modem speed up to 28.8 Kbps. See the documentation that came with your communications software for more information.

EPSON Fax-on-Demand Service

You can access EPSON's technical information library by calling (800) 922-8911 or (800) 442-2110 and providing a return fax number.

Epson Forum on CompuServe®

CompuServe members can call the Epson America Forum on CompuServe. If you are already a member, simply type GO EPSON at the menu prompt to reach the Forum.

If you are not currently a member of CompuServe, you are eligible for a free introductory membership as an owner of an EPSON product. This membership entitles you to:

- l An introductory credit on CompuServe
- l Your own user ID and password
- l A complimentary subscription to *CompuServe Magazine*, CompuServe's monthly publication.

To take advantage of this offer, call (800) 848-8199 in the United States and Canada and ask for representative #529. In other countries, call the following U.S. telephone number: (614) 529-1611, or your local CompuServe access number.

Where to Get Software Help

If you need help with your EasyPhoto software, you can contact Storm Software at the following numbers:

- l Telephone: (415) 969-9555
- l Fax: (415) 691-9825

If you have a modem and access to the Internet or other online service, you can also contact Storm Software at the following addresses:

- l World Wide Web site:
<http://www.stormsoft.com/storm/>
- l E-mail: support@stormsoft.com
- l America Online: STORMSOFT
- l CompuServe: 73060,3227
- l Prodigy: UEJR16A

Registration

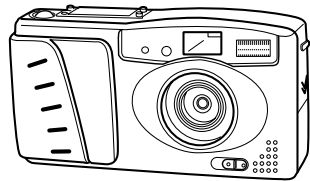
Please take a minute to fill out the registration card included with PhotoPC and mail it back to us. This enables you to receive special information on software upgrades, accessories, and new products. You'll get immediate attention if you have a problem with your PhotoPC.

Safety Instructions

Read all of these instructions and save them for later reference. Also follow all warnings and instructions marked on the camera.

- l To reduce the risk of electric shock, do not remove the camera's cover or open any compartments except as instructed in this *User's Guide*.
- l To prevent fire or electric shock, do not expose the camera to rain or moisture.
- l Do not use outdoors during a thunderstorm.
- l If the camera shows unusual signs such as noise, odor, or smoke, stop using it and turn it off immediately. Remove the batteries and/or disconnect the AC adapter.
- l Do not use harsh or abrasive cleaners. Wipe off dust with a clean, dry cloth.
- l To avoid damage to the optics of the camera, do not expose the lens to direct sunlight for extended periods of time.
- l Do not store the camera near sources of bright light, direct sunlight, high humidity, heat, excessive dirt or dust, or where it is exposed to strong vibrations or magnetic fields.
- l To prevent possible eye injury, do not take flash pictures of faces at close range.
- l Avoid sudden temperature changes, which can cause moisture to condense on the camera. Keep the camera in a case or bag if you need to move it from a cold environment to a warm one. Allow time for the camera to adjust to temperature changes before using it.

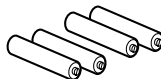
1 Getting Started



camera



hand strap



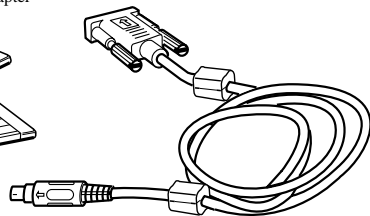
batteries



Mac adapter



software



PhotoPC cable

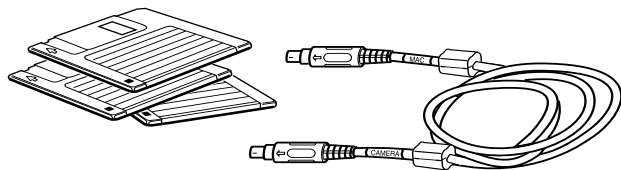
This chapter helps you get ready to use your PhotoPC. It covers the following:

- Getting to know the camera
- Installing the batteries
- Attaching the hand strap
- Removing the plastic film
- Installing your EasyPhoto software
- Installing the PhotoPC Plug-in.

Unpacking Your PhotoPC

PhotoPC for the Macintosh is available in two packages: the Mac version, which includes all the parts shown to the left, and the Mac Connectivity Kit, which includes only the parts shown on page 1-2.

The Mac Connectivity Kit works with the Windows Version of PhotoPC. Make sure you use the software and cable that came in your Mac Connectivity Kit as shown below, and not the ones that came in the PhotoPC box.

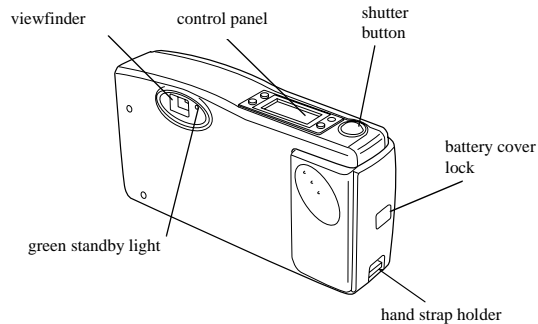
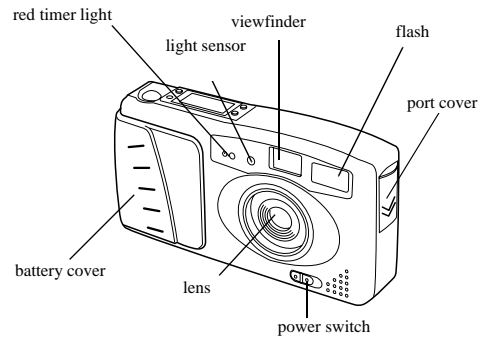


software

PhotoPC Mac cable

Getting to Know the Camera

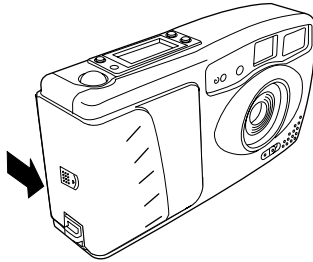
After you unpack your PhotoPC, take a few minutes to learn about its features, as shown to the right.



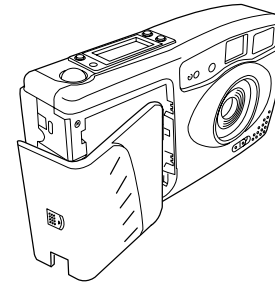
Installing Batteries

Your PhotoPC comes with four AA alkaline batteries. Make sure the camera is turned off, and follow these steps to insert the batteries:

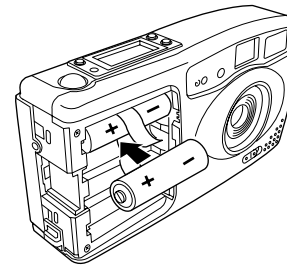
- 1 Slide the battery cover lock to the right to release the cover.



- 2 Grasp the battery cover and pull it away from the camera body as shown.



- 3 Insert all four batteries into the compartment, positioning the + and - ends as shown in the compartment. Arrange the ribbon under the batteries so you can use it to pull them out when you need to replace them. Press down on the batteries to snap them into place.



- 4 Replace the battery cover.

Handling Batteries

When your PhotoPC batteries wear out, you can replace them with any of the following:

- l Single-use AA alkaline batteries
- l Single-use AA lithium batteries (longest battery life)
- l Rechargeable AA Ni-Cad batteries (shortest battery life).

WARNING

To avoid the danger of fire or explosion, do not mix different types of batteries. Do not allow the battery contacts to touch metal objects such as coins or keys, which could short out the battery's circuits.

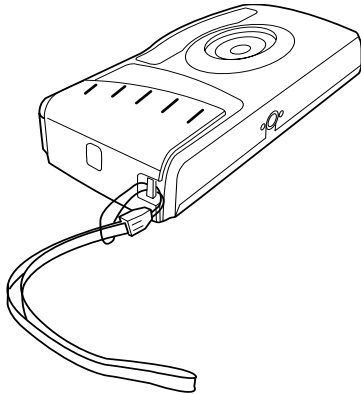
Note the following when handling batteries:

- l Do not use manganese batteries.
- l Replace all four batteries at the same time.
- l Do not drop, puncture, disassemble, or mutilate batteries. Do not get them wet or expose them to fire.
- l When the camera is not used for long periods of time, remove the batteries and store them at a low temperature in a dry location.

- l Dispose of used batteries according to the battery manufacturer's instructions and in compliance with all applicable laws. Contact your local government agency for information about battery recycling and disposal.
- l If you use rechargeable Ni-Cad batteries, replace them with four fully-charged batteries. If you find that your batteries run out faster after you recharge them a number of times, make sure you discharge them completely before recharging.

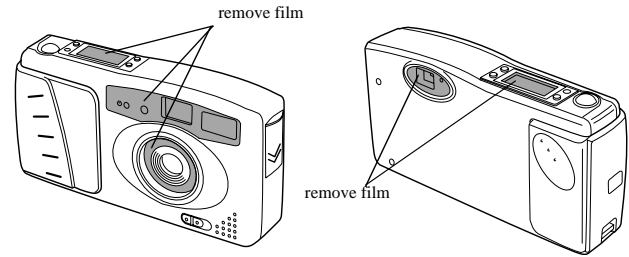
Attaching the Hand Strap

To attach the hand strap, loop the strap around the holder on the side of the camera as shown below.



Removing the Plastic Film

To protect the camera from scratches, some parts have been covered with plastic film, as shown in the gray areas below. Peel off the plastic film before you use your camera.



Installing Your EasyPhoto Software

PhotoPC comes with EasyPhoto, a software application that lets you transfer your pictures from the camera to your Macintosh and place them in documents. You can also use EasyPhoto to organize, enhance, and print your pictures.

If you have the PhotoPC Mac Version, use the software diskettes that came in the box with the camera. If you have the Mac Connectivity Kit, make sure you use the diskettes that came in the kit.

Follow these steps to install EasyPhoto:

- 1 Insert EasyPhoto diskette 1 in your diskette drive.
- 2 Double-click the Install icon. You see the EasyPhoto setup screen.
- 3 Click Continue.
- 4 Click Install.

NOTE

If you want to have the time and date of each picture automatically recorded, see page 5-2 for instructions.

Installing the PhotoPC Plug-in

The software that you installed includes the PhotoPC Plug-in. This is the interface that lets you transfer pictures from the camera to your Macintosh. If you have other applications that support the Plug-in, such as Adobe® PhotoShop™ 3.0 or Adobe PhotoDeluxe,™ you can also use these applications to transfer pictures.

First you need to install the Plug-in for PhotoShop or PhotoDeluxe.

Follow these steps:

- 1 Open the EasyPhoto folder, then the EasyPhoto files folder, then the Plug-ins folder.
- 2 Click on the PhotoPC Plug-in.
- 3 Choose Make Alias from the File menu.
- 4 Drag the alias to the PhotoShop or PhotoDeluxe Plug-ins folder.

You can now use PhotoShop or PhotoDeluxe to transfer your pictures, as well as EasyPhoto. Turn to Chapter 2 for picture-taking instructions.

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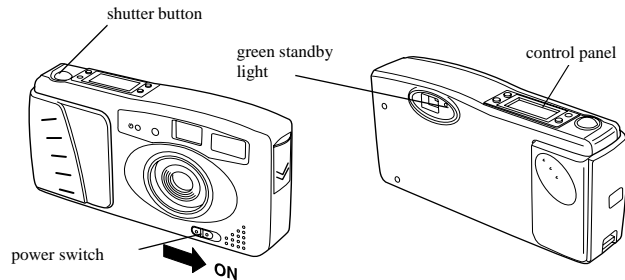
REALTORS

Using PhotoPC to take pictures is similar to using a traditional “point and shoot” camera. This chapter shows you everything you need to know, including the following information:

- Turning the camera on and off
- Saving power with auto shut-off
- Using the control panel
- Checking the battery icon
- Snapping the shutter
- Taking pictures in range
- Adjusting settings
- Erasing pictures
- Checking the picture counter.

Turning the Camera On and Off

To turn the camera on, simply slide the power switch to the ON position. The lens cover opens and the control panel on the top of the camera lights up. The green standby light on the back of the camera flashes for a few seconds. When it stops flashing and stays fully lit, the camera is ready to take pictures.



Slide the power switch to the OFF position to turn off the camera. The lens cover closes and the control panel turns off.

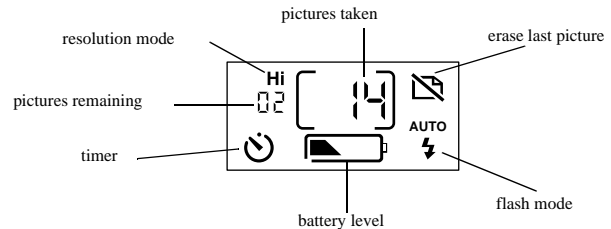
Saving Power with Auto Shut-off

If you wait more than 60 seconds before taking a picture, the camera turns off automatically to save battery power. To turn the camera back on, slide the power switch OFF, and then ON. Or press the shutter button. You will have to press the shutter button again to take a picture.

If you want, you can change the 60-second time period for auto shut-off. For more information, see page 5-3.





Using the EasyTouch Control Panel

The control panel keeps track of how many pictures you've taken and gives you important information about the status of your battery and the settings you're using.



Checking the Battery Icon

Before you take pictures, check the battery icon on the control panel. The icon shows how much battery power you have left, in the following four stages:

-  Full battery power (or AC adapter in use)
-  Battery power is decreasing
-  Battery power is almost out
-  Change batteries

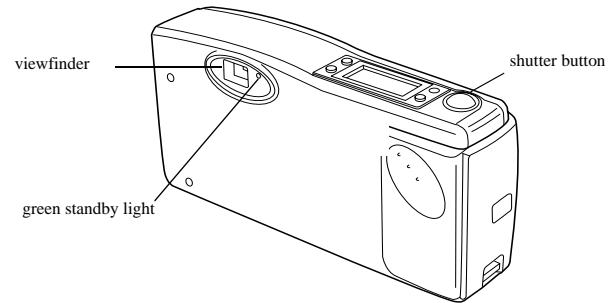
The battery icon is not precise, so you should use it only as a guide to remaining power. Several factors can affect battery life, including the surrounding temperature and the type of batteries you use. Low temperatures (especially below 50° F) weaken your batteries. See page 1-3 for information about changing batteries.

Snapping the Shutter

Follow these steps to take a picture:

- 1 Turn the camera on and wait until the green standby light stops flashing.
- 2 Look straight through the viewfinder and center your subject.

- 3 Slowly press the shutter button.
- 4 Hold the camera still until the camera beeps and the standby light starts flashing.



The flashing light indicates that the camera has captured the image and is processing it. (If you try to press the shutter button again, you'll hear an "error" beep.) When the light stops flashing, the image is saved. Saved images remain in memory for up to a year, even when the camera is turned off and the batteries are removed.

You can take another picture when the standby light stops flashing. If the light flashes longer each time you take a picture, your batteries are becoming weaker.

NOTE

Remember that the camera shuts off automatically after 60 seconds. To turn the camera back on, slide the power switch OFF, and then ON. Or press the shutter button to turn on the camera. You will have to press the shutter button again to take a picture.

Taking Pictures in Range

You should be at least 2 feet (60 cm) away from the subject you are photographing. If you want to take pictures at a closer range, you should use a 37 mm video camcorder close-up lens. See page A-5 for instructions.

However, if you use a close-up or “macro” lens, the viewfinder does not give you an accurate image of your picture. You may want to connect the camera to your Macintosh and view your close-up images on the screen before you capture them. See page 5-5 for information on viewing and taking pictures from your Macintosh.

You can take flash pictures within a range of 3 to 10 feet, as described on page 2-5.

TIP

When you’re taking pictures outdoors, make sure the sun is at your back. In very bright light (at the beach or in snow, for example), your pictures may come out too light. You can use an ND filter to reduce the amount of light. See page 6-5 for more information.

Adjusting Settings

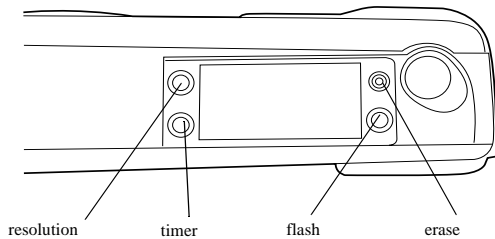
You can adjust the following three settings on PhotoPC using the EasyTouch control buttons on the top of the camera:

- Flash
- Resolution
- Timer.

Flash and resolution settings remain in effect even after you turn off the camera.

NOTE

The controls return to their factory settings when you remove or change the batteries.



Flash

PhotoPC's built-in flash has three settings as listed below, which are effective within a range of 3 to 10 feet. Press the flash control button to cycle from one setting to another. The settings appear on the control panel as shown to the right.

Auto



The flash goes off automatically whenever it's needed for adequate lighting (factory setting).

Forced Flash



The flash goes off with every picture you take. Use this setting to compensate for backlighting; for example, when you are facing the sun.

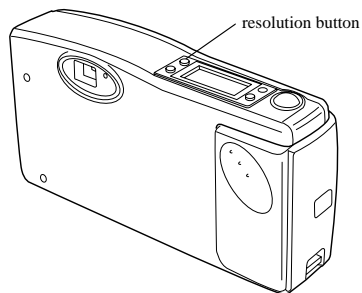
Flash Off



The flash is disabled, even when adequate lighting is not available. Use this setting for special effects, or where flash photography is prohibited.

Resolution

PhotoPC has two resolution settings, high and standard. Press the resolution control button to switch from one setting to the other. The settings appear on the control panel as shown.



High resolution

Hi Images are captured at 640×480 pixels. Your pictures include more detail, but the camera may hold only 16 pictures (factory setting).

Standard resolution

S Images are captured at 320×240 pixels. The camera holds at least 32 pictures, but the images include less detail.

You can switch freely between the two settings and store both standard and high resolution pictures in the camera. The camera's capacity varies accordingly. For example, the camera holds 24 pictures if you take 8 at high resolution and 16 at standard resolution.

TIP

Choose high resolution if you want "snapshot"-size or larger pictures. Standard resolution is sufficient for "wallet"-size pictures.

The following examples show the same image captured at standard and high resolution.



High resolution image
640 × 480 pixels



Standard resolution image
320 × 240 pixels

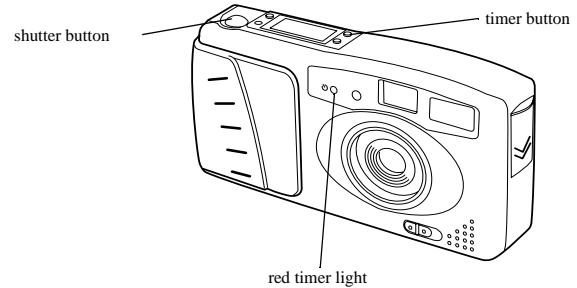
Timer



Setting the timer creates a 10-second delay between the time you press the shutter button and the actual image capture. This allows you to take a picture of yourself. The timer icon on the control panel flashes when you use the timer.

Follow these steps to take a picture with the timer:

- 1 Turn on the camera and wait until the green standby light stops flashing.
- 2 Secure the camera on a flat surface.
- 3 Press the timer button. The timer icon on the control panel flashes.
- 4 Press the shutter button. The red timer light on the front of the camera comes on and stays lit for 7 seconds. Then it flashes 3 times.

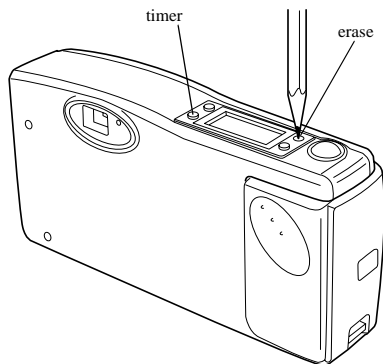


The camera beeps when the image is captured. The green standby light on the back of the camera flashes as PhotoPC processes the image. When the green light stops flashing, the timer is off and you can take another picture.

Erasing Pictures



If you don't want to keep the last picture you took, you can erase it from the camera's memory. Using a small pointed object such as a ballpoint pen, press the erase button on the top of the camera. The erase icon on the control panel flashes when you press the button.



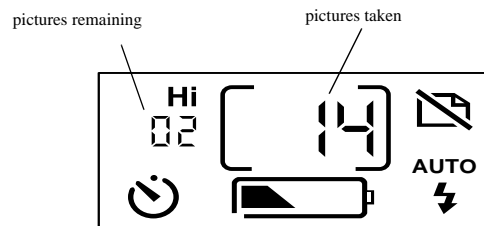
After a few seconds, the last picture you took is erased from the camera's memory. The picture counter (number of pictures taken) decreases by one. You can continue pressing the button to erase more pictures.

TIP

You can also erase all the pictures in the camera's memory. While holding down the erase button, press the timer button. The erase icon flashes until all pictures are deleted.

Checking the Picture Counter

As shown below, the large number in the center of the control panel displays the number of pictures you have taken. The smaller number on the left shows how many additional pictures you can take.



The number of pictures remaining depends on your resolution settings. If you switch between standard and high resolution, the number of pictures remaining changes. For example, if the number of pictures remaining is 2 at high resolution, it changes to 4 when you switch to standard resolution.

NOTE

Depending on the type of images you capture, your camera may hold more than 16 pictures at high resolution or 32 at standard resolution. When you take the last picture, the number of pictures remaining may show one instead of zero. When this happens, you can take an extra picture—or several extra pictures. As long as the control panel shows one picture remaining, you can take another picture.

When the camera's memory is full, the number of pictures remaining is 0. The green standby light on the back of the camera goes off, and you can't press the shutter button. You need to connect the camera to your computer and transfer the pictures. Then you can erase the images and start taking pictures again.

Turn to Chapter 3 to find out how to connect the camera to your Macintosh and transfer your pictures.

3 Using PhotoPC with Your Macintosh

When you're finished taking pictures, you can connect the camera to your Macintosh and transfer the images. Then you can use them in your letters, presentations, or just about anything you create on your Macintosh. This chapter tells you how, including:

- | Connecting PhotoPC to your Macintosh
- | Transferring pictures to your Macintosh
- | Erasing pictures from the camera
- | Using pictures in your documents
- | Closing EasyPhoto.

Connecting PhotoPC to Your Macintosh

If you have the PhotoPC Mac Version, you'll use the cable with the Mac adapter to connect the camera to your Macintosh. If you have the Mac Connectivity Kit, you'll use the cable that came in the kit.

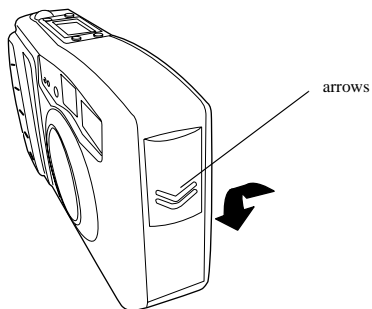
If you have the optional AC adapter, you can save on batteries by using the adapter whenever you connect the camera to your Macintosh.

The universal AC adapter should be available where you bought your PhotoPC. If not, you can order an AC adapter by calling EPSON Accessories at (800) 873-7766 (U.S. sales only). In Canada, call (800) GO-EPSON.

Follow these steps to connect the camera:

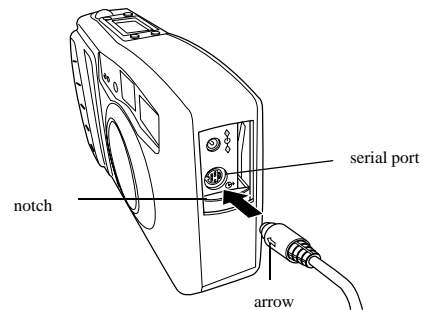
- 1 Make sure the camera is finished processing (the green standby light is not flashing). Turn off the camera and shut down and turn off your Macintosh.

- 2 Locate the port cover on the side of the camera. Press on the arrows and slide the cover down to open it.

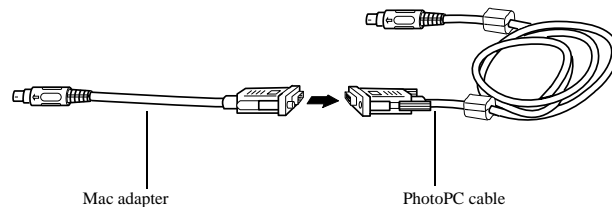


- 3 If you're using the cable in the Mac Connectivity Kit, line up the arrow on the white end of the cable with the notch on the camera's serial port. Then insert the connector. Continue with step 5.

If you're using the PhotoPC Mac version, you'll have a short Mac adapter cable in addition to the long PhotoPC cable. Connect the smaller end of the long cable to the camera's serial port as shown.



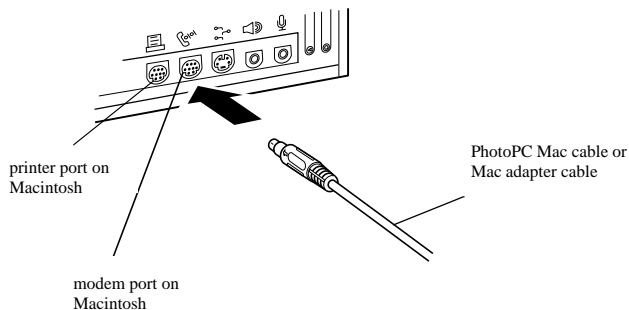
- 4 If you're using the PhotoPC cable that came with the camera, connect it to the Mac adapter cable as shown, and tighten the connector screws.



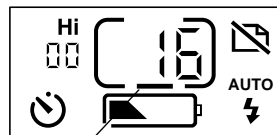
- 5 Locate the modem port or printer port on the back of your Macintosh, marked with these icons:



- 6 With the arrow on the cable facing up, line up the cable connector with the port on your Macintosh. Then insert the connector.



- 7 Turn on the camera and your Macintosh. A frame appears around the picture counter on the camera's control panel.



Line indicates that the camera is connected to your Macintosh.

NOTE

When the camera is connected to your Macintosh, you can't use any of the control buttons or the shutter button on the camera. You can operate the camera only through your Macintosh.

The camera's auto shut-off feature remains in effect when the camera is connected to your Macintosh, but shut-off takes place after 5 minutes of inactivity instead of 60 seconds. To turn the camera back on, you can slide the power switch off and on again, or you can use any of the software camera controls on your Macintosh, as explained in Chapter 5.

Transferring Pictures to Your Macintosh

Once your camera and Macintosh are connected and turned on, you're ready to transfer your pictures. You can use the EasyPhoto software that came with your PhotoPC Mac Version or in the Macintosh Connectivity Kit. If you haven't installed the software yet, do it now, following the instructions on 1-5.

Before you start, open the Chooser and make sure AppleTalk is inactive.

NOTE

If you have questions or need help as you work with your software, you can use the EasyPhoto Guide or Tips on the Help menu.



Follow these steps to transfer the pictures to your Macintosh:

- 1 Double-click the EasyPhoto icon. The first time you use EasyPhoto, you see the Add Photos window and a new gallery, "Untitled 1." (If you have used EasyPhoto before, click the Add Photos to Gallery button to see the Add Photos window.)

- 2 Click the PhotoPC button and click OK. Your pictures appear one-by-one in the PhotoPC window.



Click below a picture to display the date and time when the picture was taken. These are accurate only if you connected the camera to your Macintosh and set the clock before taking the picture. (See page 5-2 for instructions.)

If you see an error message, make sure AppleTalk is inactive, and your port settings are correct. See page 6-3 for more information.

- 3 To transfer all pictures to your Macintosh, click Add All to Gallery. To select pictures individually, click each picture you want to transfer, and then click Add to Gallery. If you select a single picture, EasyPhoto prompts you to name it. You don't have to wait for all the pictures to appear before you start selecting pictures to transfer.

EasyPhoto displays its progress as it transfers and stores each picture. Small "thumbnail" versions of the images are added to the new gallery. EasyPhoto labels your pictures with the current date and numbers them in order. After the transfer is finished, you can double-click on a picture in the gallery to view it at full size.

NOTE

If the transfer process seems too slow, try increasing your port speed. See pages 5-4 to 5-5 for more information.

- 4 Turn off the camera. The transfer process uses a lot of power, and your batteries can run out quickly.

NOTE

Once you install EasyPhoto and the PhotoPC Plug-in, you can use any program that supports the Plug-in (such as Adobe Photoshop 3.0 or

Adobe Photo Deluxe) to transfer your pictures. Select PhotoPC as the source when you acquire an image. You will see the PhotoPC window. You may need to transfer your pictures individually or in small groups, rather than all at once.

Erasing Pictures from Your Camera

After you have viewed your pictures and transferred them to your Macintosh, you can erase them from your camera. Make sure the camera is turned on and connected to your Macintosh before you start. Then follow these steps:

- 1 In the gallery, click Add Photos to Gallery. The Add Photos window appears.
- 2 Click PhotoPC and click OK. The PhotoPC window appears.
- 3 From the PhotoPC window, click Erase All. EasyPhoto asks you to confirm that you want to erase all the pictures in the camera.
- 4 Click Erase All. Your pictures disappear from the screen, and the camera resets its counter to 0.

NOTE

You can also use the Erase button in the Camera Controls window (shown on page 5-7) to erase pictures. After you disconnect the camera from your computer, you can use the erase button on the camera. See 2-9 for instructions.

If you want to close EasyPhoto now, see page 3-11. To use a picture in a document, go to the next section.

Using Pictures in Your Documents

When your pictures are saved in a gallery, you can place them in your documents. You can use your pictures in many different types of software applications, such as word processors, presentation programs, spreadsheets, database managers, page layout, and desktop publishing packages.

If you want to change a picture before you insert it, you can open it in an EasyPhoto Workshop window and crop, resize, rotate, or make other kinds of enhancements.

For more information about the EasyPhoto Workshop, see Chapter 4 or use the EasyPhoto Guide or Tips.

You can use three methods to add pictures to your documents:

- I Copy and paste
- I Drag and drop
- I Importing.

Inserting a Picture with Copy and Paste

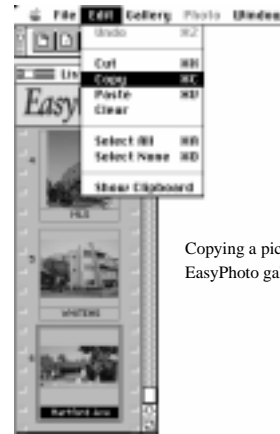
You can use this method to insert a picture in any Macintosh application.

NOTE

If your Macintosh has less than 16MB RAM, you may need to increase your virtual memory setting and the memory allocation for your application. See pages 6-3 to 6-4 for more information.

Follow these steps to copy and paste a picture:

- 1 Make sure the picture you want to use is showing in the gallery on your screen.
- 2 Click on the picture to select it and choose Copy from the Edit menu, as shown below.



Copying a picture from an EasyPhoto gallery

Alternatively, you can double-click on the picture to open it in a Workshop window. You may find that your pictures look better when you copy them from the Workshop. When using a Workshop window, you have to choose Select All from the Edit menu before you choose Copy.

- 3 Start your word processor or other application.
- 4 Open the document where you want to use the picture.

- 5 Position the insertion point where you want to add the picture.
- 6 Choose Paste (or Paste Special) from the Edit menu:

A copy of the picture appears in your document:



Pasting a picture into a word-processing document

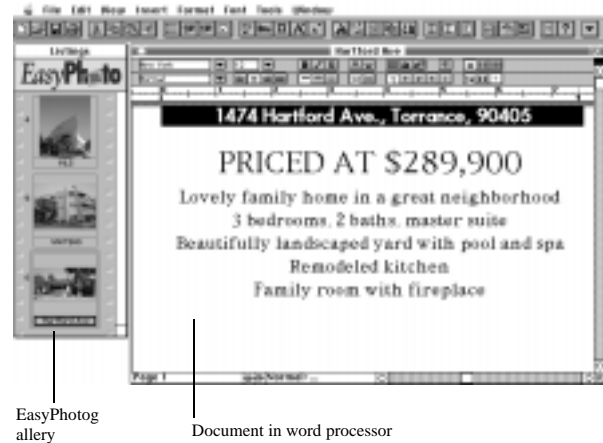


Inserting a Picture with Drag and Drop

You can use this method with any application that supports it—for example, Microsoft® Word 6.0 or PageMaker® 6.0. If you're not sure, give it a try. If it doesn't work, you can use the copy and paste or importing method.

Follow these steps to drag and drop a picture into your document:

- 1 Make sure the picture you want to use is showing in the gallery on your screen.
- 2 Start your application.
- 3 Open the document where you want to use the picture. Make sure your screen displays both the document and gallery windows, as shown to the right.
- 4 Drag the picture from the gallery to your document. You see an outline of the picture showing its size on the page.



- 5 Position the outline where you want the picture and release the mouse button. In a few seconds, a copy of the picture appears in your document.

Inserting a Picture by Importing

If your application can't import a JPEG file, you need to change the picture's file type to PICT. See 4-10 for instructions. Then follow these steps:

NOTE

If your Macintosh has less than 16MB RAM, you may need to increase your virtual memory setting and the memory allocation for your application. See pages 6-3 to 6-4 for more information.

- 1 Start your application.
- 2 Open the document where you want to use the picture.
- 3 Position the insertion point where you want to place the picture.
- 4 Choose the Insert Picture command. The command may have a different name in your application. It may appear on the File menu, the Insert menu, or another menu.



After you choose the command, you see a document selection dialog box like the following:



- 5 Locate and select your picture.
- 6 Click the Insert button. The picture appears in your document.

Closing EasyPhoto

When you are finished working with your pictures, follow these steps to close EasyPhoto:

- 1 Choose Quit from the File menu. EasyPhoto asks if you want to save the new gallery document.
- 2 Click Save. EasyPhoto then prompts you to name the gallery.
- 3 Type a name and click Save. The gallery is saved, and you can use it to access your pictures whenever you want.

NOTE

The EasyPhoto Guide tells you how to use EasyPhoto with pictures from other sources, such as scanners and photo CDs. You can use EasyPhoto to work with picture files in the following formats:

- | | |
|-------------------|----------------------|
| JPEG (read/write) | Photo CD (read) |
| PICT (read/write) | GIF (read) |
| BMP (read) | PhotoShop 2.5 (read) |
| TIFF (read) | EPS (read) |

4 Working with Your Pictures



MLS+ Associates Architects

Proposal: City of Torrance

MLS+Associates have been working with City Urban Planning Commissions for the last 45 years. The availability of a senior architect throughout a project is one of the main reasons we have been awarded more than 75% of the contracts proposed in the last two decades. Our experience working with people has created a unique working relationship where everyone in the community has a chance to voice their concerns and ideas. This approach has helped us form lasting relationships with all the communities we have had the privilege to work with. MLS+Associates takes great pride in the work we create and feel the voices of the communities from past projects give the best insight into our success.

MLS+ Associates Architects

- Urban Planning
- Recreational Locations
- Corporate Parks
- Commercial Buildings
- Residential Designing



Using your EasyPhoto software, you can organize your pictures in galleries, enhance the images with the Workshop, and add visual impact to almost any kind of document with your photos. To find out how to transfer pictures to your Macintosh and insert them in your documents, see Chapter 3. You can also use the EasyPhoto Guide or Tips to get software instructions.

This chapter describes the following EasyPhoto activities:

- l Using galleries
- l Making changes with the Workshop
- l Saving and printing your pictures
- l Changing picture file information.

Using Galleries

When you transfer your pictures from the PhotoPC camera to your Macintosh, they are stored in a gallery, shown on the right. Using the slide show feature, you can turn a gallery into a slick presentation on your screen.

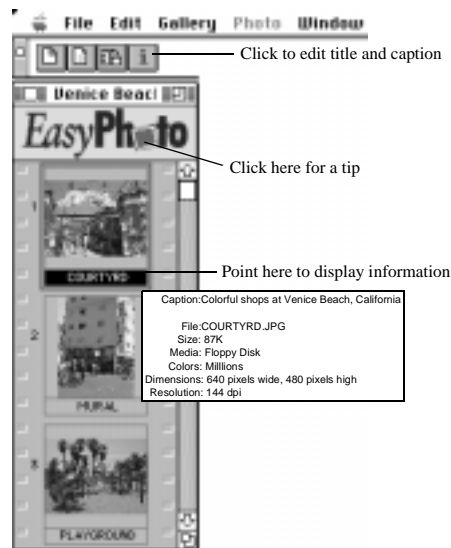
You can easily rearrange the pictures in a gallery by clicking and dragging. You can also open several galleries at once and drag thumbnails from one to the other. This lets you organize your pictures by subject matter, project, or in any way you want.

Adding or Changing Picture Information

In addition to displaying small thumbnail versions of your pictures and short titles, galleries store more detailed information about each image.

You can pause the mouse pointer on the picture's title to display the following information on a title card:

- l Caption
- l File name and location
- l File size and media (hard disk drive, floppy disk, or CD).



Gallery showing technical information card

Press Option and point to the title to display the following additional information about your picture:

- l Number of colors
- l Dimensions
- l Resolution.

Follow these steps to add a caption or change a picture's title:

- 1 Click the photo to select it.
- 2 Click the Edit Photo Information button on the toolbar. The Photo Info window appears, as shown:



- 3 Type the text you want for the picture's title or caption.

The same picture may have a different title and caption in another gallery.

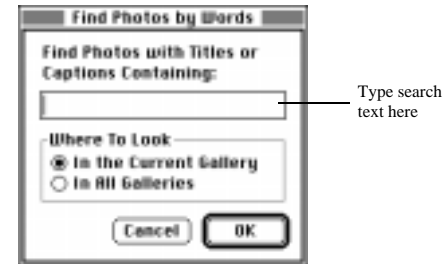
- 4 Close the Photo Info window when you're finished.

Finding a Picture

It's easy to find a picture in one of your galleries. You can search for a picture using a word or phrase in its title or caption. You can even find a picture that resembles another picture.

Follow these steps to search for pictures by words:

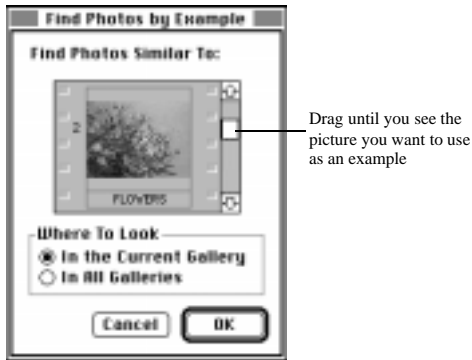
- 1 Choose Find Photos by Words from the Gallery menu. The following dialog box appears:



- 2 Type the word or phrase you're looking for.
- 3 Under Where To Look, click In the Current Gallery or In All Galleries.
- 4 Click OK. EasyPhoto displays a new gallery that contains all pictures with your word or phrase in their title or caption.

Follow these steps to search for pictures by example:

- 1 Open the gallery that has the picture you want to use as an example.
- 2 Choose Find Photos by Example from the Gallery menu. A dialog box like the following appears:



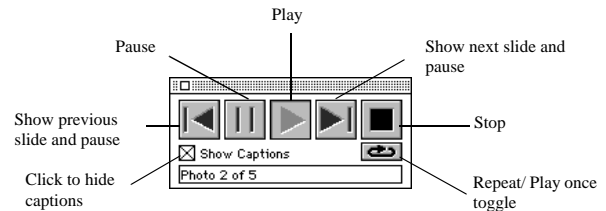
- 3 Use the scroll bars to display the example photo.
- 4 Under Where To Look, click In the Current Gallery or In All Galleries.
- 5 Click OK. EasyPhoto displays a new gallery with all pictures that resemble the example picture.

Displaying a Gallery as a Slide Show

The Slide Show feature lets you present a series of pictures at full size against a dramatic black background. You can play the show automatically or interactively with the Slide Show Controls.

- 1 Choose Display As Slide Show from the Gallery menu.

The gallery's first picture appears full-size on the screen, with the Slide Show Controls box in the lower-right corner:



- 2 Press Esc to quit the slide show and return to your desktop.

Use the EasyPhoto Guide if you need more information or if you want to customize the slide show.

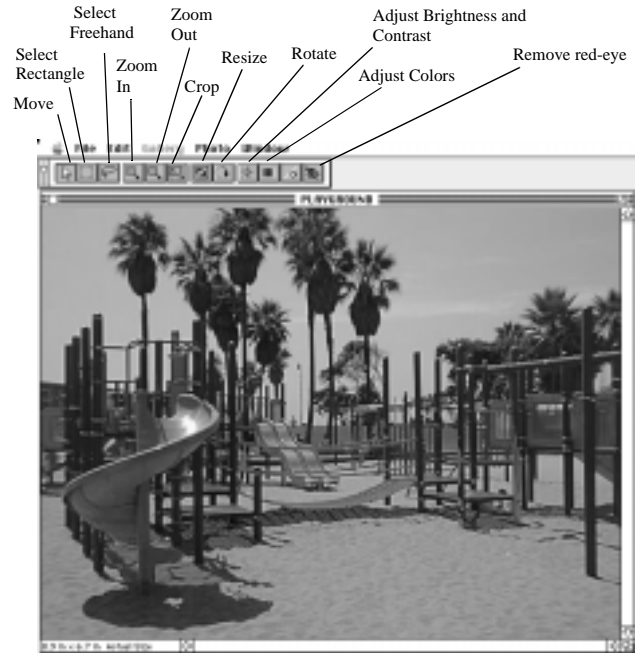
Making Changes with the Workshop

EasyPhoto's Workshop lets you make the following kinds of changes to your pictures:

- | Cropping
- | Resizing
- | Rotating
- | Adjusting brightness and contrast
- | Adjusting colors
- | Removing red-eye
- | Cutting, copying, pasting, and flipping.

To open a picture in a Workshop window, double-click its thumbnail in the gallery. Your picture appears in a Workshop window like the one on the right.

If you need a closer look at your picture, you can use the zoom feature. Click the Zoom In button, and then click on your picture. Click the Zoom Out button, and then click on your picture again to return to your original view.



NOTE

You can also use image editing software such as Adobe Photoshop to enhance or modify your pictures.

Cropping

You can crop your pictures by selecting either a rectangular area or a freehand area to keep; everything outside of the area is cut away. Follow these steps:

- 1 Click either the Select Rectangle button or the Select Freehand button.
- 2 Drag the mouse to enclose the area you want to keep. A dotted line appears around the selected area.
- 3 Click the Crop button. EasyPhoto deletes everything outside of the selected area.

Resizing

When you change the size of your picture, EasyPhoto automatically keeps the original proportions and resolution. Your picture retains its high quality and is never distorted. Follow these steps:

- 1 Click the Resize button. Arrows appear in the corners of your picture and your pointer becomes a resize tool.
- 2 Drag the resize tool to change your picture's size. Length and width information is displayed in the lower left corner of the window as you work.

- 3 Release the mouse button when the picture is the size you want.
- 4 Click another button or press Esc when you're finished.

NOTE

You can also use your word processor or other software to change the size of a picture after you import it.

Rotating

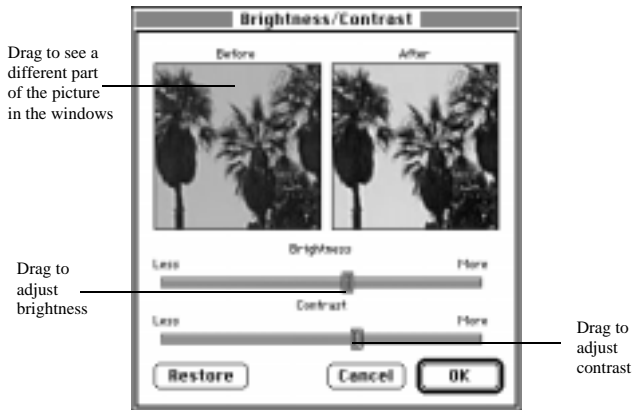
You can rotate your picture and tilt it at any angle you want. Follow these steps:

- 1 Click the Rotate button. Curved arrows appear around your picture and your pointer becomes a rotate tool.
- 2 Drag the rotate tool to turn your picture. Rotation information is displayed in the lower left corner of the window as you work.
- 3 Release the mouse button when the picture is rotated the way you want it.
- 4 Click another button or press Esc when you're finished.

Adjusting Brightness and Contrast

Changing the brightness of a picture lets you make it lighter or darker; changing the contrast adjusts the difference between the picture's light and dark areas. Follow these steps:

- 1 Click the Brightness and Contrast button. You see a window like the one to the right:



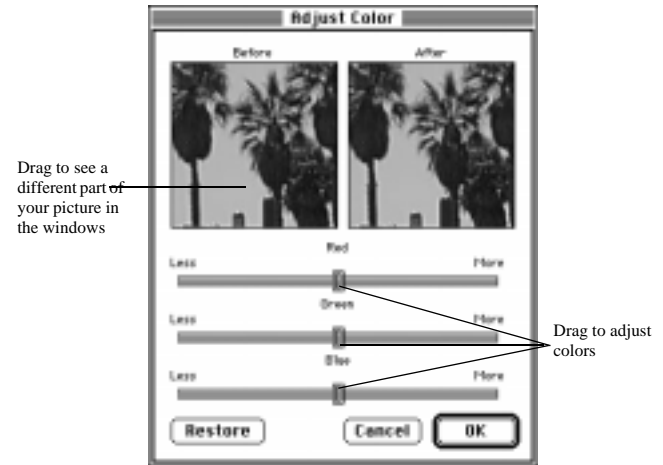
- 2 Drag the sliders to make the adjustments you want. The After sample shows you the results of your changes.

- 3 When you're done, click OK to keep your changes and close the Brightness/Contrast window.

Adjusting Colors

You can change the way your picture looks by adjusting the intensity and relationship of the three primary colors on your screen: red, green, and blue. Follow these steps:

- 1 Click the Adjust Color button. You see a window like the one below:



- 2 Drag the sliders to change the red, green, and blue colors in your picture. The After sample shows you the results of your changes.
- 3 Click OK to save your changes to the picture.

NOTE

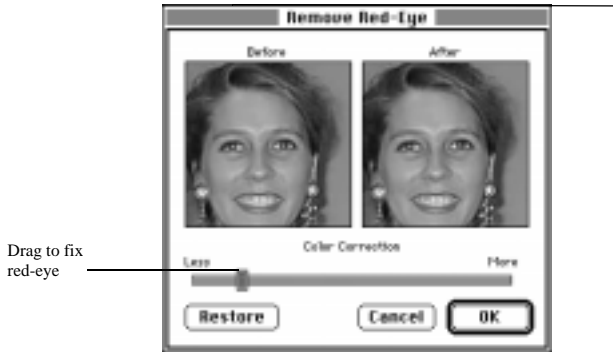
If you want to change the colors, brightness, or contrast in only one part of your picture, select that part before you make the adjustment.

Removing Red-Eye

When you take flash pictures of faces, sometimes people's eyes appear red. Follow these steps to fix the red-eye problem:

- 1 Click the Select Freehand button.
- 2 Drag the mouse to select the eye area.

- 3 Click the Remove Red-Eye button. You see a window like the one below:



- 4 Drag the slider until the eyes look normal in the After sample.
- 5 Click OK to save your changes to the picture.

Cutting, Copying, Pasting, and Flipping

You can choose Cut, Copy, or Paste from the Edit menu to take a selected part of one picture and add it to another picture. You can also “reverse” your picture or turn it into a mirror image.

- l Choose Cut from the Edit menu to remove a selected area. A white “hole” appears where you made the cut. EasyPhoto places the cut-out area on the Clipboard.
- l Choose Copy from the Edit menu to place a copy of the selected area (or the entire picture if there is no selection) on the Clipboard. The original picture is not affected.
- l Choose Paste from the Edit menu to paste an image from the Clipboard into another picture.
- l From the Edit menu, choose Flip Horizontal to flip your picture from left to right or Flip Vertical to flip it from top to bottom.

Saving and Printing Your Pictures

When you’re finished working with your picture in the Photo Workshop, you should save it. Then you can place it in one of your documents or just print it out.

- l Choose Save from the File menu to save your picture.
- l Choose Print from the File menu to print your picture. You can also use a gallery’s menu to print out all the thumbnails.

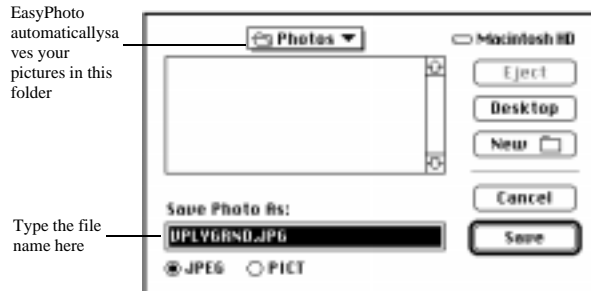
Changing Picture File Information

When you work with EasyPhoto, you don't need to keep track of your picture files. EasyPhoto does it for you. However, you can change a picture's file name, file type, or move it to a new folder if you want.

Follow these steps:

- 1 In a Workshop window, choose Save Photo As from the File menu. A dialog box like the one to the right appears.

EasyPhoto names your picture files according to the date and order in which they were transferred from the camera. The original file type is JPEG, which provides high image quality in small, compressed files.



- 2 Choose a new folder or disk, if you want.
- 3 Choose the file type: either JPEG or PICT. PICT files are larger (in bytes) than JPEG files, but you can insert or import them into most Macintosh software applications.
- 4 Type a name for the file in the Save Photo As box.
- 5 Click Save. EasyPhoto saves a copy of your picture with the new information.

EasyPhoto puts a thumbnail for the new picture in the current gallery. You have two copies of the picture: one with the new file information and one with the original file information. You can delete the original if you don't need it.

NOTE

See the EasyPhoto Guide in the Help menu if you want to change the folder where your pictures are automatically saved.

5 Using Advanced Features

When PhotoPC is connected to your Macintosh, you can customize several of the camera's settings. You can also take pictures by controlling the camera directly from your Macintosh. This chapter describes the following:

- | Getting ready to use advanced features
- | Setting the clock
- | Setting auto shut-off
- | Setting the shutter speed
- | Adjusting port settings
- | Taking pictures from your Macintosh.

Getting Ready to Use Advanced Features

You use the PhotoPC Settings software to work with advanced features.

Follow these steps to get started:

- 1 Connect the camera to your Macintosh as described in Chapter 3.

- 2 Turn on both the camera and your Macintosh system.

- 3 Double-click the PhotoPC Settings icon, shown below, in the PhotoPC software folder.



PhotoPC Settings

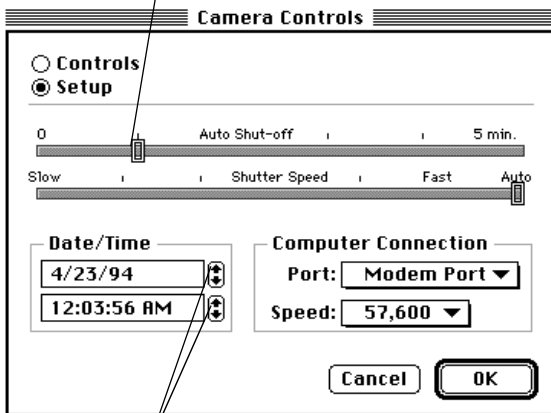
The Camera Controls window appears, as shown on page 5-2.

You can switch between Setup and Controls by clicking on the buttons.

NOTE

You can also access the Camera Controls windows from the PhotoPC screen. Click the Camera Options button.

Drag to customize auto shut-off



Click to change date and time, if necessary

Setting the Clock

If you set the clock, PhotoPC automatically records the correct date and time of your pictures. When you transfer the pictures from the camera to your Macintosh, you can see exactly when each shot was taken.

In order to have the time and date recorded, you need to set the camera's clock from your Macintosh.

NOTE

After you set it, the PhotoPC clock keeps time accurately until you replace the batteries; at that point you need to connect the camera to your Macintosh and reset the clock.

Follow these steps to set the camera's clock:

- 1 Connect the camera to your Macintosh and open the Camera Controls window as described on page 5-1.

The Date/Time box shows the current values in your camera's internal clock. Use the arrow buttons to change these values if necessary.
- 2 Click OK. EasyPhoto updates the date and time in your camera.

Setting Auto Shut-off

PhotoPC's power-saving feature automatically shuts off the camera if you wait more than 60 seconds before taking a picture.

You can adjust this time period by connecting the camera to your Macintosh and using PhotoPC Settings. Follow these steps:

- 1 Connect the camera to your Macintosh as described in Chapter 3 and open the Setup window as described on page 5-1.

The Auto Shut-off slider is set to 1 minute, as shown on page 5-2.
- 2 Drag the slider to the left to reduce the time period, or to the right to increase it.

As you move the slider, the screen shows the number of minutes. You can select from 0 to 5 minutes.

If you select 0, the camera shuts off immediately after your picture is captured and saved to memory. When you turn it back on, you have just 30 seconds to take a picture after the standby light stops flashing.
- 3 When you are finished, click OK.

NOTE

Auto Shut-off occurs after 5 minutes when the camera is connected to your Macintosh. You can't change this time period.

Setting the Shutter Speed

When the camera is connected to your Macintosh, you can use PhotoPC Settings to adjust the shutter speed. Slower shutter speeds allow more light to strike the lens; faster speeds allow you to take “stop-action” pictures of moving subjects. *Shutter speed settings remain in effect only while the camera is connected to your Macintosh.*

The factory shutter speed is Auto, which means that PhotoPC automatically adjusts the shutter speed based on the amount of light available. You will probably want to use this setting most of the time, unless you are planning to take stop-action pictures or use special lighting effects.

NOTE

When you adjust the shutter speed manually, you can't use the auto flash setting. To take a picture with the flash, you need to use the forced flash setting. See page 2-5 for more information.

To set the shutter speed, follow these steps:

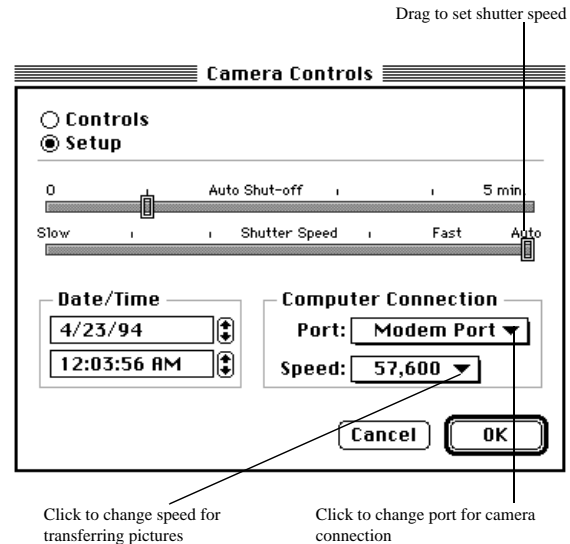
- 1 Connect the camera to your Macintosh as described in Chapter 3 and open the Setup window as described on page 5-1.

The Shutter Speed slider is set to Auto.

- 2 Drag the slider to the left to reduce the shutter speed, or to the right to increase the shutter speed. The shutter speed range is from 1/30 second to 1/10,000 second.
- 3 When you are finished, click OK.

Adjusting Port Settings

You can use PhotoPC Settings to adjust the computer connection for PhotoPC. You need to adjust these settings if you see an error message when you connect the camera. You may also want to experiment with the speed setting to decrease the time it takes to transfer pictures to your Macintosh.



Change the Port setting only if you want to use a different port for the camera or you get an error message. When you change the Port setting, you lose the connection between the camera and your Macintosh.

Follow these steps to set the port and speed for your PhotoPC connection:

- 1 Connect the camera to your Macintosh as described in Chapter 3 and open the Setup window as described on page 5-1. The Computer Connection box shows the current port settings.
- 2 Click the arrow to change the Port setting. You can select the modem port or the printer port.
- 3 Click the arrow to change the Speed setting.
- 4 When you are finished, click OK.

NOTE

EasyPhoto automatically chooses a speed that works with most Macintosh computers. You can experiment to choose the fastest speed that works on your system. The following settings are available:

- l 9600
- l 19,200
- l 38,400
- l 57,600

Increasing the port speed allows you to transfer pictures from the camera to your Macintosh much faster. Your batteries will last longer too.

Taking Pictures from Your Macintosh

When the camera is connected to your Macintosh, you can take pictures and use PhotoPC features through the software on your Macintosh. The only control you can use on the camera itself is the power switch.

When you take pictures from your Macintosh, you can see each image on your screen before you capture it. This “live preview” feature works somewhat like a video camera, except that the image moves more slowly. Live preview is especially helpful when you are using a close-up lens.

NOTE

Taking pictures from your Macintosh with live preview uses a lot of battery power. If you don't have the PhotoPC AC adapter, you may want to buy it. See Appendix A for more information about obtaining and using the AC adapter.

The Auto Shut-off feature remains in effect when the camera is connected to your Macintosh (except when you use live preview). However, the camera is shut off after 5 minutes of inactivity. To turn the camera back on, slide the power switch off and on again.

Follow these steps to take pictures from your Macintosh:

- 1 Connect the camera to your Macintosh as described in Chapter 3.
 - 2 Position the camera so that it faces the subject. Using a tripod gives you maximum flexibility in setting up your shots.
 - 3 Turn on both the camera and your Macintosh system.
 - 4 Double-click the EasyPhoto icon. A gallery appears.
 - 5 Click the Add Photos to Gallery button. The PhotoPC screen appears.
 - 6 Click the Camera Options button. The Camera Controls window appears, as shown on page 5-7.
 - 7 Click Show Live Preview to display your image in the viewfinder window.
- You can move or tilt the camera until you see the image you want to capture in the window. The image is updated every three seconds.

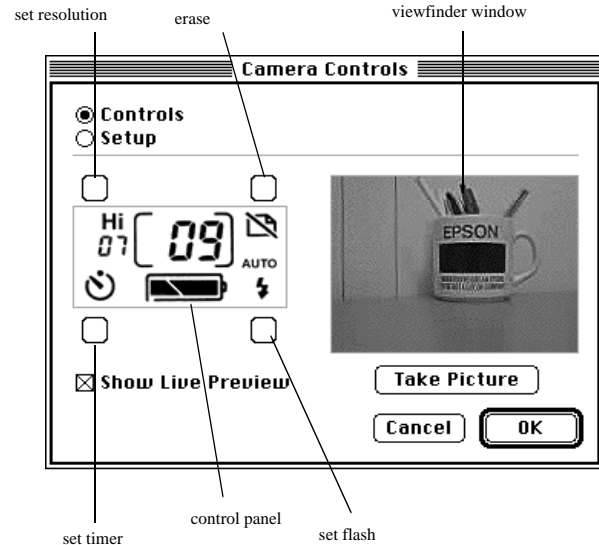
You can click the buttons on your screen to set the resolution, flash, timer, and erase features, just as you use the buttons on the camera. The control panel on your screen displays the same information as the control panel on the camera. For more information about the control panel, see Chapter 2.

Snapping the Shutter

To snap the shutter from your Macintosh, simply click the Take Picture button. The green standby light flashes and the camera beeps. When the standby light stops flashing, the image is saved and you can shoot another picture.

NOTE

You can't turn off the camera when you're using live preview. Click Show Live Preview to turn off the live preview feature, and then turn off the camera.



6 Maintenance and Troubleshooting

Your PhotoPC is easy to take care of, and any problems you may have are easy to solve. This chapter covers the following:

- l Caring for the camera
- l Solving camera problems
- l Solving picture problems.

If you can't solve a problem after checking the solutions in this chapter, see page 3 of the Introduction for information on where to get help.

Caring for the Camera

Your PhotoPC camera requires only the most basic care. Before you do any maintenance procedures on the camera, be sure to read the Safety Instructions in the Introduction.

Then follow these guidelines:

- l Use a clean, dry cloth to keep the camera free of dust.
- l Don't use harsh or abrasive cleaners.
- l To clean the lens, first blow off any loose dust or dirt. Then breathe on the lens and wipe off all moisture with a soft, lint-free cloth or lens cleaning tissue.
- l To avoid scratching the lens, don't press too hard.
- l Keep the lens covered (power switched off) when you're not using the camera.
- l If necessary, clean the battery contacts with a dry cloth.

Don't store the camera in the following locations:

- l Where it is exposed to direct sunlight, for example, on a car dashboard
- l Near sources of bright light or high humidity
- l Near heat sources or in a closed car
- l In areas with excessive dirt or dust
- l Where it is exposed to strong vibrations or magnetic fields.

Solving Camera and System Problems

Before you call for help, check this list of problems and possible solutions.

The camera has no power.

- l Check the power switch and make sure the camera is turned on.
- l The camera may have shut off automatically. Slide the power switch off and then on.
- l Check the batteries and make sure they are installed correctly. Replace the batteries if necessary, following the instructions on 3.
- l If you are using the AC adapter, make sure it is plugged into a working outlet.

You can't take a picture with the camera.

- l The camera may have shut off automatically. When you press the shutter button, the camera turns on. You have to press the button again to take a picture.
- l The flash may be recharging. Wait until you see the green standby light, and try again.
- l The camera may be full. Check the picture counter on the control panel. Erase a picture using the erase button, or transfer the pictures to your Macintosh and then erase them. See Chapter 3 for information about transferring your pictures and erasing them with your Macintosh.
- l The camera may be connected to your Macintosh. When it's connected, you can't use any of the controls on the camera itself. See 5 for instructions on taking pictures from your Macintosh.

The flash doesn't work.

- l Make sure the flash setting is either automatic or forced flash as described on page 5.
- l Check the batteries and make sure they are installed correctly. Replace the batteries if necessary, following the instructions on 3.

You get an error message when you try to transfer your pictures from the camera to your Macintosh.

- | Make sure the cable is connected correctly, as described on 1.
- | Make sure the camera is turned on and the batteries have enough power.
- | Open the Chooser (or Network Control Panel) and make sure AppleTalk is inactive.
- | Check the computer connection settings in your PhotoPC software. You may need to change the settings for the Port and Speed as described on page 4.
- | If you're using a PowerBook Duo,TM open the PowerBook Setup Control Panel and make sure it's set to Standard mode. Then restart your Macintosh.

Your pictures transfer too slowly from the camera to your Macintosh, and the transfer process uses up your batteries too quickly.

- | Try increasing your port speed. Using your PhotoPC Settings software, you can choose the fastest speed that works on your Macintosh, up to 57,600 baud. See pages 5-4 to 5-5 for more information.

You are unable to copy and paste or import your photo into a document.

- | Try increasing your virtual memory. For example, if you have 8MB RAM, increase your virtual memory to 16MB. You can do this in the Memory Control Panel.
- | Increase the memory allocation for your word processor or other software by following these steps:
 - 1 Click the software icon to select it.
 - 2 Choose Get Info from the File menu to find the application's memory allocation settings.
 - 3 Increase the memory to 4000K or 5000K.
- | Try turning off any extensions that are unnecessary. Certain extensions might conflict with either of the software applications.

See your Macintosh documentation or online help for more information on changing memory settings and turning off extensions.

Solving Picture Problems

If you're not satisfied with the pictures you get from PhotoPC, you may need to adjust some of the camera settings. Or maybe you need to brush up on your photography techniques. Read the suggestions listed below and give them a try.

Your pictures display poor image quality on the screen or when you print them out.

- PhotoPC captures images in 24-bit color (millions of colors). Your pictures do not display maximum image quality if your monitor or your Macintosh's video capability doesn't support at least thousands of colors. You may need to upgrade your system to achieve the best possible image quality.
- If your pictures look better on the screen than when you print them out, you may need to upgrade your printer. An EPSON color ink jet printer, for example, provides excellent image quality.

Your picture is blurry or out of focus.

- Make sure your subject is within the camera's range. You should be at least 2 feet away to take a picture without the flash, and 3 to 10 feet away to take a picture with the flash.
- Make sure you hold the camera steady until you hear the beep.
- Make sure your subject isn't moving. If you want to photograph a moving subject, try increasing the shutter speed. For information about changing the shutter speed, see 3.
- Make sure your flash setting is either automatic or forced flash, as described on page 5.

Your picture is too dark (underexposed).

- You may need to use the flash. Make sure the flash setting is either automatic or forced flash, as described on page 5.
- If you're using the flash, make sure your subject is within the range of 3 to 10 feet.
- Use EasyPhoto or another image editing program to adjust the picture's brightness and contrast. See 7 for instructions.

Your picture is too light (overexposed).

- If you're using the forced flash setting, it may be too bright. Try setting the flash to auto 5.
- The camera's light sensor may be covered or dirty. Make sure you're not blocking it when you take pictures. You may need to clean it with a soft, dry cloth.
- If you're facing a bright light source, you may need to shoot your picture from a different angle.
- If you're taking pictures in the snow or at the beach on a sunny day, you may need to use an ND filter. A 37 mm ND-4 camcorder filter should work in most cases.

- Use EasyPhoto or another image editing program to adjust the picture's brightness and contrast. See 7 for instructions.

Part of your picture is missing.

- Make sure you're not blocking the lens with your finger, hand strap, clothing, or other object.

A horizontal or vertical red line appears on your picture.

- Red lines are caused by glare. Avoid photographing very shiny surfaces that reflect a glare of light into your lens.
- In very bright light, you may need to use an ND filter to avoid glare. Try a 37 mm ND-4 camcorder filter.

The wrong date and/or time are displayed on your pictures.

- You need to connect the camera to your Macintosh and reset the camera's clock. See 2 for instructions. Whenever you change the camera's batteries you need to reset the clock.

The colors in your picture don't look right.

- When you take pictures under certain artificial lighting conditions, the colors may be slightly distorted. You can use EasyPhoto to adjust the colors. See 7 for instructions.

Your pictures don't look as good as they used to.

- Your camera's lens may be dirty or dusty. Try cleaning it as described on page 1.

A *Using Optional Accessories*

PhotoPC's flexibility allows you to use it with a variety of options. You can increase the camera's storage capacity by installing a 2MB or 4MB PhotoSpan™ memory module. To help you save battery power, particularly when transferring pictures to your Macintosh, you can use the optional AC adapter.

The PhotoSpan module and AC adapter should be available where you bought your PhotoPC. You can also order them from EPSON Accessories at (800) 873-7766 (U.S. sales only). In Canada, call (800) GO-EPSON.

For close-ups, wide-angle pictures, and special effects, you can use any standard 37 mm video camcorder lens or filter. See page A-5 for recommendations and ordering information.

This chapter includes the following instructions:

- Expanding your PhotoPC Memory
- Installing the PhotoSpan memory modules
- Using the universal AC adapter
- Using optional lenses.

Expanding Your PhotoPC Memory

PhotoPC comes with 1MB of internal memory, which holds up to 16 pictures at high resolution or 32 pictures at standard resolution. You can increase the camera's capacity by installing a 2MB or 4MB PhotoSpan external memory module (flash memory board), as described in the table on page A-2.

PhotoPC capacity

Number of photos	1MB internal memory	With 2MB PhotoSpan A882401	With 4MB PhotoSpan A882411
At high resolution	16	48	80
At standard resolution	32	96	160

CAUTION

Once you install a PhotoSpan module, you can't remove it. Make sure you think about your future needs before you decide whether to install the 2MB module or the 4MB module.

Installing PhotoSpan Memory Modules

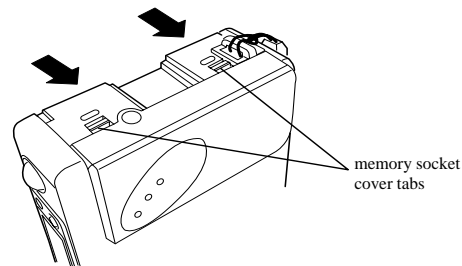
Before you install a PhotoSpan module, make sure you erase all pictures in the camera and turn it off.

CAUTION

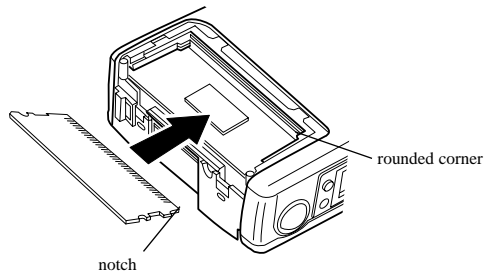
PhotoSpan modules are sensitive to static electricity and easily damaged. Be sure you ground yourself by touching a metal object before you handle the module, and never touch the module's metallic area.

Follow these steps to install a PhotoSpan module:

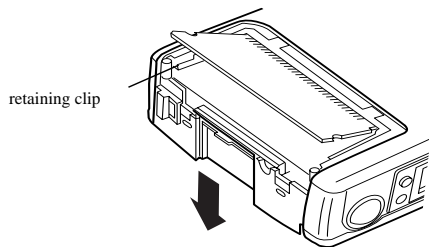
- 1 Open the battery compartment and remove the batteries as described on page 1-3.
- 2 Place the camera on end to access the memory socket cover tabs.
- 3 Press down on the tabs with your thumbs and carefully pull the socket cover away from the camera.



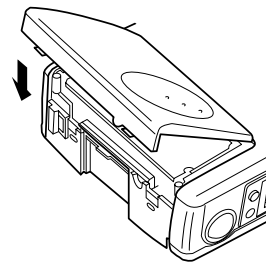
- 4 Position the module so that the notch is aligned with the rounded corner of the socket.



- 5 Slide the module into the socket at an angle as shown, pressing along the edge until it clicks into place.
- 6 Press down on the module until it snaps into the retaining clips at the sides of the socket.



- 7 Place the socket cover on the camera body and press down until it snaps into place.



- 8 Replace the batteries in the battery compartment and replace the battery cover as described on page 1-3.

When you take your next picture, the pictures remaining number on the control panel shows your camera's expanded capacity.

With expanded memory, you may notice a delay between the time you press the shutter button and when the camera beeps. You can reduce this delay by pressing the button down halfway, holding it until you're ready to take the picture, and then pressing it down the rest of the way.

Using the Universal AC Adapter

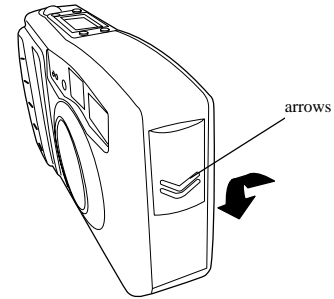
The Universal AC adapter (A883021) allows you to connect your camera to a standard electrical outlet. This is especially useful when you are transferring pictures and operating the camera from your Macintosh. The adapter powers the camera, but does not charge the batteries.

WARNING

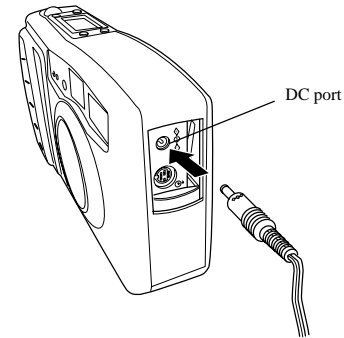
- 1 Use only the adapter designed for PhotoPC. Using any other adapter may cause fire, electrical shock, or injury.
 - 2 Do not alter the plug on the power cable, and do not use the adapter for any purpose other than powering your PhotoPC.
 - 3 If the power cable plug doesn't fit your outlet, use a power cable with a plug that fits.
-

To avoid losing any images or settings, make sure the camera is finished processing and turned off before you connect or disconnect the AC adapter. Then follow these steps:

- 1 Locate the port cover on the side of the camera. Press on the arrows and slide the cover down to open it.



- 2 Plug the adapter cable into the DC port on the camera.

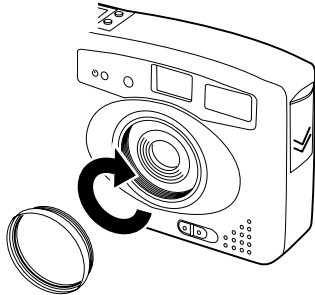


- 3 Plug the end of the power cable into the adapter.
- 4 Connect the other end of the power cable to an electrical outlet.

Using Optional Lenses

Although you can use any standard 37 mm video camcorder lens or filter with PhotoPC, lenses manufactured by Tiffen are recommended. Call DC Pro at (800) 522-7835 for ordering information.

To attach a lens, screw it onto the camera as shown below.



When you use a close-up lens, the viewfinder does not give you an accurate image of your picture. The best way to take close-up pictures is by connecting the camera to your Macintosh. You can use the live preview feature to see your images on the screen before you capture

them. See

page 5-5 for more information about taking pictures from your Macintosh.

CAUTION

Handle the camera carefully and avoid jarring it when using an optional lens.

B Specifications

Physical Dimensions

Width	6.5 in. (166 mm)
Height	3.5 in. (88 mm)
Depth	1.9 in. (47 mm)
Weight (without batteries)	11 oz. (310 g)

Power

Sources

4 AA batteries (single-use alkaline, single-use lithium, or rechargeable Ni-Cad)

Optional universal AC adapter (A883021)

Consumption

Approximately 100 milliwatt
at power-on

Approximately 4 W during image
processing

Maximum 12 W during flash discharge

Technical

Product type	CCD (charge coupled device) still frame camera
Image size	640 × 480 pixels (high resolution)
	320 × 240 pixels (standard resolution)
Bit depth	16 million colors, 24-bit
Serial interface	8-pin DIN (camera); 8-pin DIN (Macintosh)
	(Cable adapter for RS-232C interface in PhotoPC Mac version)
Internal memory	1MB flash memory
Optional expansion memory	2MB (0.5MB flash memory × 4 chips)
	4MB (0.5MB flash memory × 8 chips)

Photographic

Lens	f = 6 mm (equivalent to a 43 mm lens on a 35 mm camera)
Range	2 ft (60 cm) to infinity
Exposure	Equivalent to ISO 130
Shutter	Automatic electronic shutter, 1/30 to 1/10,000 second
Viewfinder	Optical
Aperture	f5.6
Flash modes	Auto, forced flash, off
Flash range	3 ft to 10 ft (1 m to 3 m)



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